

PUREVIEW™ DOORS & FRAMES SERVICE MANUAL

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REVISION HISTORY

VERSION 1.00 (03/13)

- New manual

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1-A. SERVICE NOTICES

To ensure proper functionality and optimum performance, it is strongly recommended that Hillphoenix display cases be serviced by qualified technicians who have experience working with commercial refrigerated display merchandisers. For a list of Hillphoenix-authorized installation/service contractors, please visit our Web site at:

www.hillphoenix.com



DANGER!

Turn off power to the case before removing/replacing the existing lighting system. Failure to do so may result in serious injury or death if all instructions are not followed carefully.



DANGER!

Be certain to check for luminaire wiring and/or other electrical components before drilling into the case body. Failure to do so may result in fire risk, as well as serious injury or death if all instructions are not followed carefully.



ATTENTION!

Do not expose wiring to edges of sheet metal or other sharp objects. Failure to do so may result in fire risk, as well as wiring abrasion or other case damage.

- Complete replacement of wire assemblies is recommended whenever required. Splice wires only if necessary using proper materials.
- Keep doors and frames clean for product efficiency. This can also help reduce energy consumption and potential health hazards.
- Whenever binding gasket or plastic parts, use food grade silicone.
- Always use the correct tool for the job to be performed. This ensures proper installation and minimizes safety risks.
- If there is any doubt about the work to be performed, consult with a certified technician or Hillphoenix representative.

1-B. REQUIRED TOOLS

The following tools are required for door/frame servicing:

- Hillphoenix door tool
- 7/16" wrench (for lock nut)
- 11/32" wrench (for torsion rod hinge pin - wide part)
- 1/4" wrench (for torsion rod hinge pin - narrow part)
- 5/32" Hex key
- #2 Phillips-head screwdriver
- Drill
- Flat-head screwdriver
- Needle-nose pliers
- Cutting pliers
- Deep-well socket (for torsion rod insertion)
- Rubber or plastic mallet
- Pry bar

2. PARTS

PARTS

Below is a list of the servicable parts (and their locations) found in PureView door cases. Corresponding pictures and illustrations are found throughout this service manual.

2-A. DOOR PARTS

- Torsion Rod
- Door Power Coupling
- Door Handle
- Door Gasket

2-B. FRAME/MULLION PARTS

- LED Luminaires
- Frame Power Coupling
- Anti-Condensate Wiring
- Striker Plates

2-C. CORNICE PARTS

- Door-Squaring Mechanism
- Locking Pin
- Torsion Washer
- Hold-Open Assembly
- Electrical Junction Box

2-D. FRONT SILL PARTS

- Front Bumper
- Front Panel Joint Trim
- Front Panel
- Front Sill Extension
- LED Power Supplies
- LED Power Connection
- Anti-Condensate Heater Wire Connections

DOOR SERVICE

3-A. RELEASING & SETTING TORSION

1. To release the torsion, secure the supplied Hillphoenix door tool on the widest part of the torsion rod's hinge pin (Fig 3.1). You may also use an 11/32" wrench if preferred. Turn the hinge pin in the direction of the door handle, just enough to disengage the torsion wheel from the spring button.

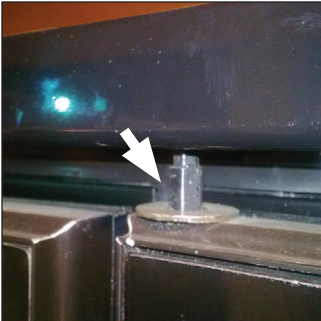


Fig 3.1 Torsion rod hinge pin.

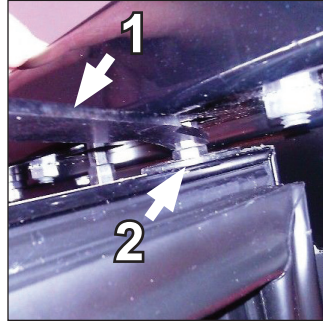


Fig 3.2 1) Using the provided Hillphoenix door tool, 2) turn the hinge pin in the direction of the door handle.

2. While holding the hinge pin in place with the Hillphoenix door tool, look on top of the cornice and pull the locking pin free from the door-squaring mechanism (Fig. 3.3).
3. While still holding the hinge pin in place with the Hillphoenix door tool, locate and depress the spring button with a small hex key (Fig. 3.4).
4. Turn the hinge pin in the opposite direction to release all torsion.
5. To set the torsion, secure the supplied Hillphoenix door tool (or 11/32" wrench) on the widest part of the torsion rod's hinge pin again. Turn the hinge pin in the direction of the door handle. The torsion washer will advance in 60° increments with an audible "click". Refer to Table 1 for pre-load information.
6. Once torsion is set, insert the locking pin.

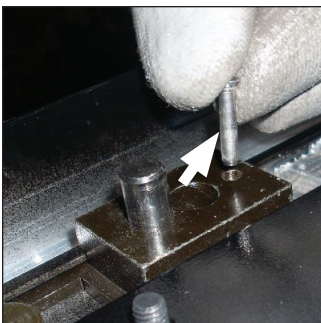


Fig 3.3 Pull the locking pin free from the door-squaring mechanism.

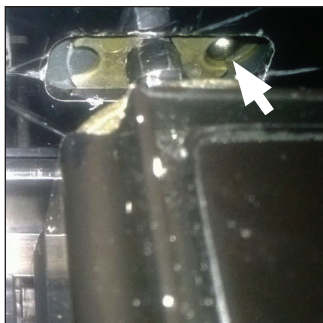


Fig 3.4 Depress the spring button to release all torsion.

TABLE 1

Application	Door Size	Pre-Load	Notes
Medium Temp	24 x 75	2 clicks	• Square door before setting torque. • DO NOT force torsion washer. • DO NOT exceed pre-load settings. • DO NOT adjust torsion with locking pin in place.
	30 x 75		
	32 x 75		
	36 x 75		
Low Temp	64.5	3 clicks	
	68.5		

3-B. REMOVING & REPLACING HOLD-OPEN ASSEMBLIES

1. Open the door enough to access the door-mounted shoulder bolt (Fig. 3.5) and the door washer on the top of the door.
2. Loosen and remove the door-mounted shoulder bolt and the door washer. This will allow the hold-open rod to swing free of the door (Fig. 3.6).



Fig 3.5 Remove door-mounted shoulder bolt and washer.

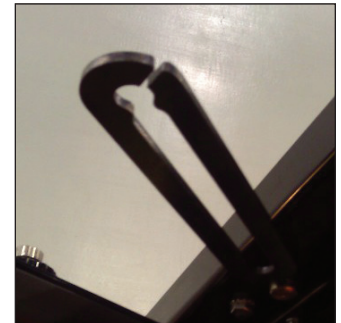


Fig 3.6 Hold-open rod can be swung free of the door.

3. Fully open the door.
4. Loosen and remove the frame-mounted shoulder bolt and hold-open washer (Fig. 3.7). The hold-open rod will now be free of the case.
5. Reverse these steps to re-engage or to install a new hold-open assembly.



Fig 3.7 Remove frame-mounted shoulder bolt and washer.

3. DOOR SERVICE

3-C. REMOVING DOORS

1. Turn off power to the case.
2. Release the door torsion (see Section 3-A) and remove the hold-open assembly (see Section 3-B).
3. Partially open the door. Then, using the Hillphoenix door tool (or a 1/4" wrench), depress the torsion rod by engaging the narrow area of the torsion rod's hinge pin with the door tool (Fig. 3.8) and pressing downwards.

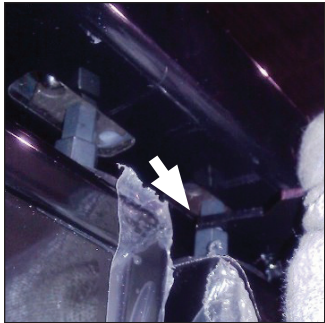


Fig 3.8 Engage the Hillphoenix door tool to the narrow section of the stepped hinge pin.



Fig 3.9 Depress the torsion rod downwards, then pull top of door free of the cornice assembly.

4. With the torsion rod depressed, pull the top of the door free from the cornice (Fig. 3.9), then slowly release the downward pressure on the torsion rod.
5. Lift the bottom of the door free of the frame power coupling (Fig. 3.10), and carefully set aside the door.

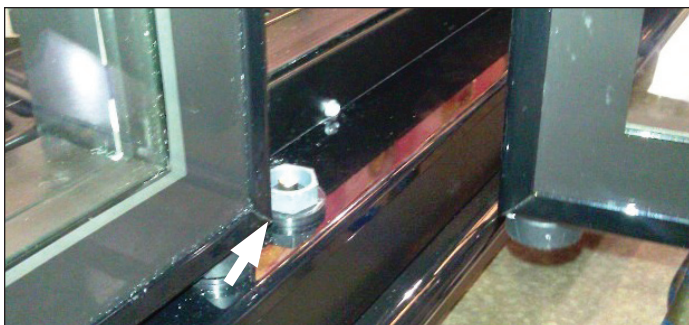


Fig 3.10 The door power coupling fits into the frame power coupling.

3-D. INSTALLING DOORS

1. Turn off power to the case.
2. Lifting the door, fit the door power coupling on top of the frame power coupling receptacle (Fig. 3.10), thus creating the electrical connection. Let the weight of the door rest on the front sill.

3. Using the HP door tool, depress the hinge pin by engaging the narrow area of the hinge pin with the door tool and pressing downwards.
4. With the hinge pin depressed, tilt the top of the door under the cornice assembly. Align the hinge pin with the hex opening in the cornice assembly and release pressure from the hinge pin until it engages with the cornice assembly. The door is now secure in case.
5. Re-attach the hold-open assembly (see Section 3-B), then reset the torsion (see Section 3-A).

3-E. SQUARING DOORS

1. Fully open the door and loosen the 7/16" hex nut with the supplied Hillphoenix door tool (or 7/16" wrench) (Fig. 3.11).
2. Using a T-handle (or 5/32" hex key), turn the inner squaring mechanism left-or-right to adjust the door position (Fig. 3.12). When the door is properly squared, hand-tighten the 7/16" hex nut until finger tight, then give the hex nut a 1/4 turn with the Hillphoenix door tool to complete tightening.

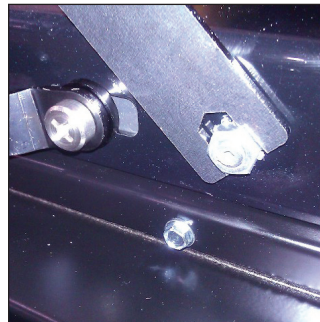


Fig 3.11 Loosen 7/16" hex nut.



Fig 3.12 Square the door by turning the squaring mechanism left or right as needed.

3-F. REPLACING TORSION RODS

NOTE: Door must be removed before removing the torsion rod (see Section 3-C).

1. Place the door on a flat, level surface.
2. Use a hammer to tap the blade of a putty knife or a small flat-head screwdriver between the body of the door and torsion rod flange (Fig. 3.13).
3. Once a small gap is opened, pry the torsion rod free of the door housing and remove (Fig. 3.14).



Fig 3.13 Use a small flat-head screwdriver as a wedge to pry loose the torsion rod from the door.



Fig 3.14 Remove the torsion rod.

4. Insert the new torsion rod into the door housing. After placing an appropriately sized deep-well socket over the hinge pin of the torsion rod, use a hammer to gently drive the torsion rod into the recess. Stop when the torsion rod flange is flush with the door surface.
5. Re-install the door per the instructions in Section 3-D.

3-G. REPLACING DOOR POWER COUPLINGS

NOTE: Door must be removed before removing the door power coupling (see Section 3-C).

1. Place the door on a flat, level surface.
2. Use a hammer to tap the blade of a putty knife or a small flat-head screwdriver between the body of the door and the door power coupling (Fig. 3.15).
3. Once a small gap is opened, pry the door coupling free of the door housing and remove (Fig. 3.16). Disconnect the faulty door coupling from the door wiring, then discard.



Fig 3.15 Use a small flat-head screwdriver as a wedge to pry loose the door power coupling from the door.



Fig 3.16 Change out the door coupling.

4. Connect the new door power coupling to the door wiring. Secure wires inside the molded sleeve, then insert the sleeve into the door housing.
5. Insert the new door power coupling into the door housing.
6. After placing an appropriately sized deep-well socket over the electrical connector inside the door power coupling, use a hammer to gently drive it into the recess. Stop when the flange is flush with the door surface.
7. Re-install the door per the instructions in Section 3-D.

3-H. REPLACING DOOR GASKETS

1. Peel away old door gasket from track (Fig. 3.17).
2. Wipe away any residue from gasket area.
3. Starting at top-torsion rod corner, press new gasket into gasket track (Fig. 3.18).
4. Continue pressing into track, moving across the top, down the side, and finishing with the bottom of the door.

NOTE: For b-swings doors, gasket track runs up to back of edge of door. In this case, apply a small amount of adhesive to the bottom-side of the gasket that protrudes over onto the door edge.



Fig 3.17 Peel away old door gasket from track.



Fig 3.18 Press new gasket into gasket track.

3-I. REPLACING DOOR HANDLES

NOTE: Door Handle Replacement Kit (Fig. 3.19) must be ordered before attempting to replace door handles. The kit contains the following three items:

- Instruction sheet
- Promoter sponge
- 2 adhesive pads

3. DOOR SERVICE

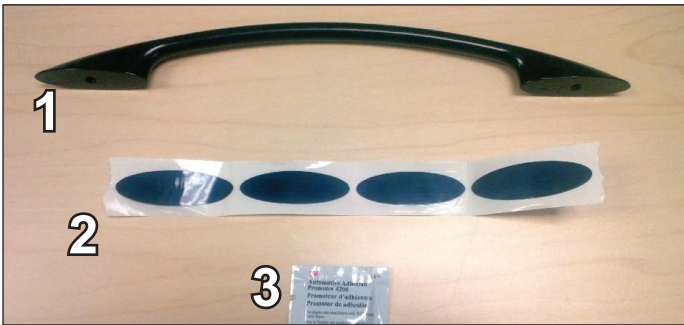


Fig 3.19 1) Door handle 2) Adhesive pads 3) Promoter sponge

1. If the old handle is still attached to the door, measure the distance from the bottom of the door rail for vertical placement of handle (Fig. 3.20), then measure the distance from the side of the door rail for centering the handle (Fig. 3.21). If the old handle is no longer attached, take the measurement on an adjacent door.



Fig 3.20 Measuring for vertical placement of handle.

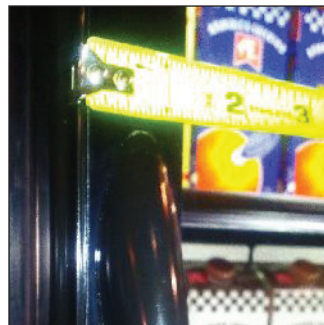


Fig 3.21 Measuring for centering the handle.

2. Using a razor blade, remove any old adhesive residue from the door and handle (if old handle is being re-used), then clean the handle area of the door with a soft rag.
3. Using the measurements that were taken earlier, mark the precise locations for seating the door handle with the tape measure.
4. Clean the new handle's contact surfaces with the promoter sponge. Allow surface to dry. **WARNING: DO NOT attempt installation without the promoter sponge.**



Fig 3.22 Apply the adhesive pad to ends of the door handle.

5. Remove one adhesive pad, being careful not to touch the adhesive. Carefully apply the adhesive side to one end of the door handle (Fig. 3.22). **Do not remove the protective tape until you are ready to install the door handle.** Repeat for the other end of the door handle.
6. Remove the protective tape from the adhesive pads and firmly press the handle onto the door surface. Keep the pressure constant for 1 minute.

NOTE: Once the door handle has been properly attached, be certain to mark the door "Do Not Open" for at least 24 hours afterwards to ensure that the door handle sets securely.

FRAME SERVICE

4-A. REPLACING LED LUMINAIRES

Before you replace the LED light luminaire, you will first need to identify the location of the luminaire's wiring connections.

For medium temperature cases, look 3-4 inches to the left or right of the bottom of the luminaire to see where the luminaire wiring runs into the inside front sill extension through a small plastic bushing (Fig. 4.1-1).

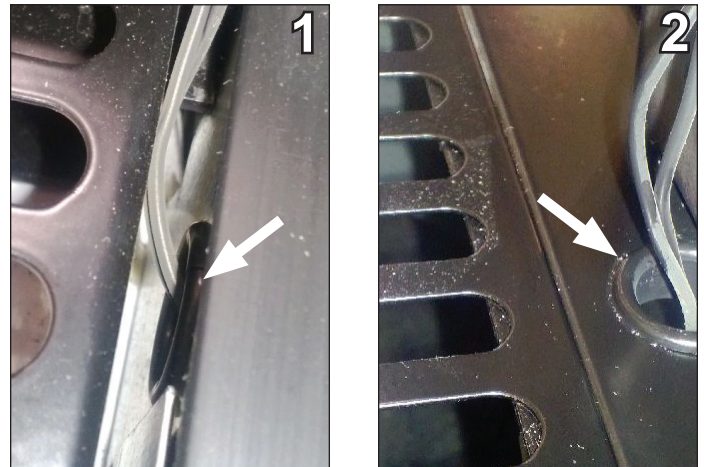


Fig 4.1 LED luminaire wiring is fed through either 1) a small plastic bushing on the side of the inside front sill extension (medium-temp cases) or 2) through a small access hole on top of the inside front sill extension (low-temp cases).

For low temperature cases, the wiring runs through a small access hole (Fig. 4.1-2) directly below the luminaire, on top of the inside front sill extension. Once you have determined the location of the wiring connections, disconnect per the following instructions:

Medium Temp Case Access

1. Turn off power to case lighting circuit.

2. Carefully remove the front sill extension cover (Fig. 4.2), which will expose the LED wiring raceway.



Fig 4.2 Remove the inside front sill extension cover.

3. Disconnect LED luminaire wiring from LED power supply wiring.

Low Temp Case Access

1. Turn off power to case lighting circuit and remove any product from the case that may interfere with the steps that follow.
2. Remove the wire racks (Fig. 4.3), then the deck pans, then the return air grill (Fig. 4.4). The wiring connections will now be accessible from inside the case.

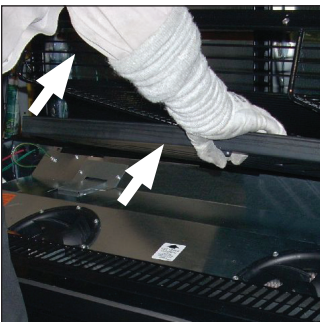


Fig 4.3 Remove the wire racks and deck pans.

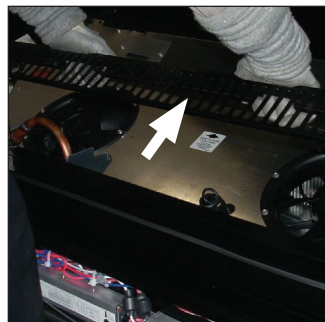


Fig 4.4 The return air grill.

3. Disconnect LED luminaire wiring from LED power supply wiring.

Once the LED luminaire has been disconnected from the power supply wiring, identify the type of mounting hardware that is utilized and replace the fixture per the following instructions:

Screw-In Mounting

1. Starting at the bottom of the LED luminaire and working your way upwards, remove all mounting hardware (Fig. 4.3).
2. Remove the luminaire from the case.
3. Reverse the first 2 steps to install the new LED luminaire.



Fig 4.5 Remove all mounting hardware.

Snap-In Mounting

4. Starting at the top of the LED luminaire and working your way downwards, remove the fixture by pushing down on one side of the LED snap-in gasket (Fig. 4.4) and gently pulling it free of the snap-in track.



Fig 4.6 Gently pull back the snap-in track, then remove the luminaire.

5. Remove the luminaire from the case.
6. Reverse the first 2 steps to install the new LED luminaire.

To complete the installation, connect the LED luminaire wiring to the LED wiring harness at the appropriate location. Re-secure any loose wiring with wire ties, then re-energize the lighting circuit to verify that the LED fixture is working properly.

For medium-temp cases, re-install the front sill raceway cover. For low-temp cases, re-install the return air grill, the deck pans, and the wire racks..

4. FRAME SERVICE

4-B. REPLACING LED POWER SUPPLIES

NOTE: LED power supplies will be located in the front sill or in an electrical junction box on top of the case.

Front Sill

1. Turn off power to case lighting circuit.
2. Remove the front bumper (if present), the front panel joint trim (if present), then lift and remove the front panel.



Fig 4.7 LED power supply located behind the front panel.

3. Disconnect all wiring from the faulty power supply (Fig. 4.5).
4. Remove the mounting hardware—the power supply can now be removed from the case.
5. Install the new power supply and reconnect the wiring as follows:
 - POWER SUPPLY OUT (red/blue) to LED LUMINAIRE (red/blue)
 - POWER SUPPLY IN (black/white) from CASE LIGHTING CIRCUIT (black/white)
6. Re-secure any loose wiring with wire ties, then re-energize the lighting circuit and verify that the power supply is functioning properly.
7. Re-install the front panel, then the front panel joint trim (if present), and then the front bumper (if present).

WARNING: when re-installing the front panel, be certain that wiring is secured with wire ties to prevent wires from being pinched between the front panel and the front extrusion.

Electrical Junction Box

1. Turn off power to case lighting circuit.
2. Remove the cover from the electrical junction box on the top of the case (Fig. 4.6).
3. Disconnect all wiring from the faulty power supply.
4. Remove the mounting hardware; the power supply can



Fig 4.8 LED power supply located on top of case

now be removed from the junction box.

5. Install the new power supply and reconnect the wiring as follows:
 - POWER SUPPLY OUT (red/blue) to LED LUMINAIRE (red/blue)
 - POWER SUPPLY IN (black/white) from CASE LIGHTING CIRCUIT (black/white)
6. Re-secure any loose wiring with wire ties, then re-energize the lighting circuit and verify that the power supply is functioning properly.
7. Re-install the junction box cover.

4-C. REPLACING FRAME POWER COUPLINGS

NOTE: Door must be removed before replacing the frame power coupling (see Section 3-C).

1. Remove the front bumper (if present), the front panel joint trim (if present), then lift and remove the front panel.
2. Disconnect the frame power coupling's wiring from the case wiring inside the front panel housing.
3. Using a set of needle-nose pliers or a flat-head screwdriver, remove the E-clip (Fig. 4.8) from the frame power coupling body, then pull the power coupling up through the top of the frame housing.

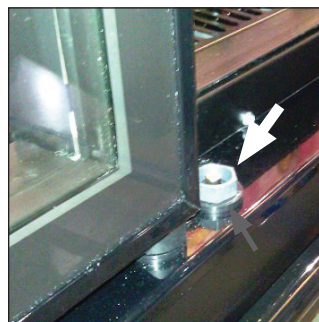


Fig 4.9 Removing the door exposes the frame power coupling.

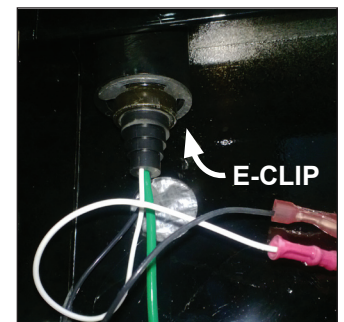


Fig 4.10 The E-clip and frame power coupling wiring.

4. Install the new power coupling into the frame housing, then re-insert the E-clip and reconnect the wiring.
5. Re-install the front panel, then the front panel joint trim (if present), and then the front bumper (if present).
6. Re-install the door (see Section 3-D).

4-D. REPLACING DOOR-SQUARING MECHANISMS

NOTE: Door must be removed before removing the door-squaring mechanism (see Section 3-C).

1. Remove the hold-open assembly (see Section 3-B).
2. Remove the door-squaring pinion (Fig. 4.9).

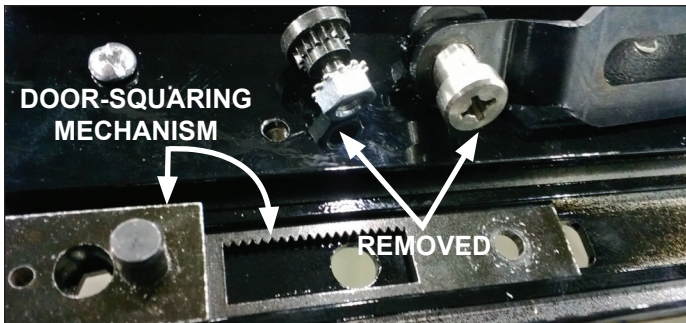
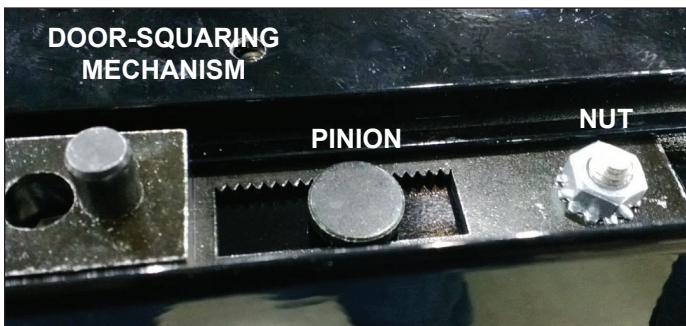


Fig 4.11 In the cornice assembly, remove the hold-open assembly nut and door-squaring pinion in order to remove the faulty door-squaring mechanism.

3. On top of the cornice, slide the squaring mechanism towards the center of door area and remove through the relief cut out (Fig. 4.10).
4. Insert the new squaring mechanism into the relief cut-out—over the new torsion washer—and slide back to its original position.
5. Re-install the door-squaring pinion, then tighten nut until finger-tight.
6. Re-install the hold-open assembly.
7. Re-install the door (see Section 3-D). If necessary, square the door (Section 3-E)—remembering to give the hex nut a 1/4 turn with the Hillphoenix door tool to complete tightening.

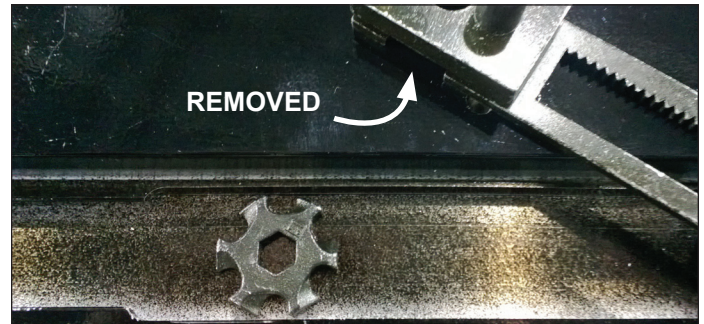
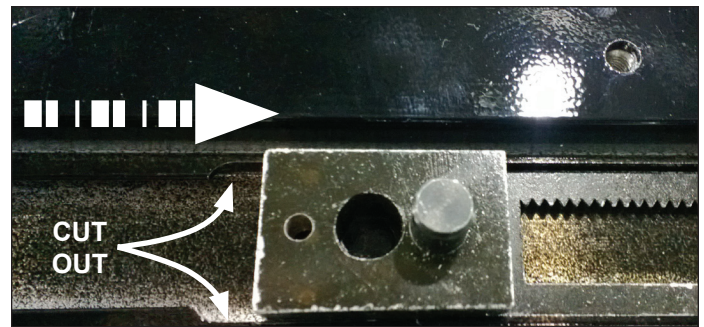


Fig 4.12 Slide the door-squaring mechanism towards the center of the door area and remove through the cut-out.

4-E. REPLACING TORSION WASHERS

1. Complete steps 1–3 of the instructions for replacing door-squaring mechanisms (see Section 4-D).
2. Remove the old torsion washer (Fig. 4.11) and install the new torsion washer.
 - Ramps on new torsion washer should be facing upwards.
 - For left-swing door, be certain that stamped “L” is visible on torsion washer.
 - For right-swing doors, be certain that stamped “R” is visible on torsion washer.
3. Repeat steps 4–7 of the instructions for replacing door-squaring mechanisms (see Section 4-D) to complete the installation.

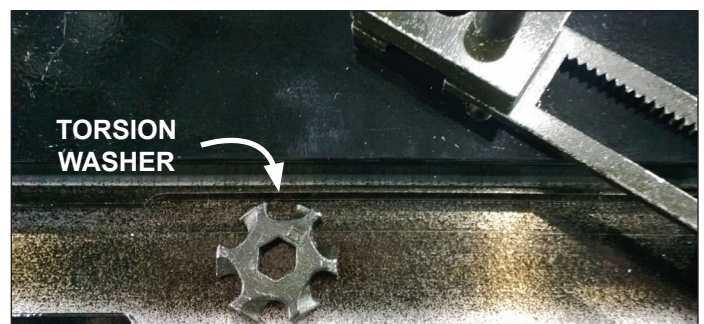


Fig 4.13 The torsion washer is located beneath the door-squaring mechanism.

4. FRAME SERVICE

4-F. REPLACING FRAME ANTI-CONDENSATE WIRING

NOTE: verify resistance value of new heater wiring against Table 1 (pg. 4) before proceeding.

1. Turn off case power.
2. Remove the front bumper (if present), the front panel joint trim (if present), then lift and remove the front panel.
3. Disconnect anti-condensate wiring from the case wiring (Fig. 4.12) at the appropriate location: for medium-temp cases, the connection is inside the front sill extension; for low-temp cases, the connection is inside the front sill.

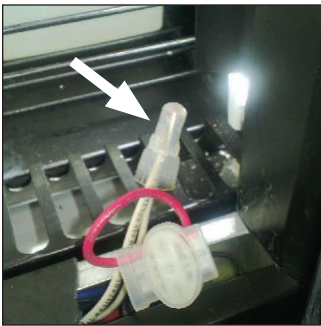


Fig 4.14 Disconnect the anti-condensate wiring from case wiring inside front sill extension (medium-temp case shown).

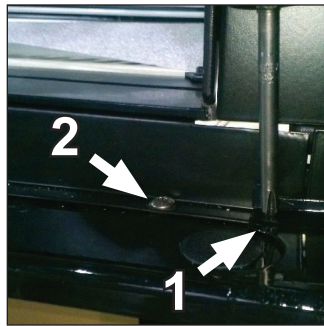


Fig 4.15 1) After removing any joint trim, 2) remove the upper and lower striker plates.

4. Fully open all case doors until hold-open assemblies engage. Remove the foam stripping from perimeter of each door opening, being certain to note the orientation of the material to ensure proper re-insertion later.
5. Unscrew and remove upper and lower striker plates (Fig. 4.13).
6. Using flat-head screwdriver, carefully pry loose vertical striker plates (Fig. 4.14) that are covering the mullions.
7. Remove faulty anti-condensate wire (Fig. 4.15).
8. Fish leads of new anti-condensate wire into front sill

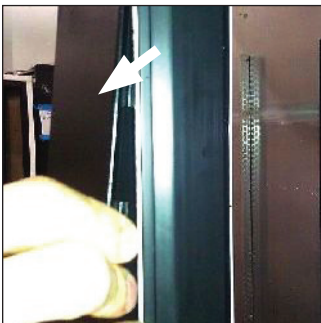


Fig 4.16 Remove the vertical striker plates.

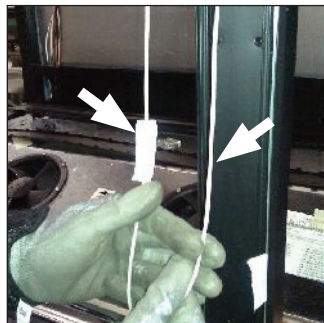


Fig 4.17 Remove and replace the faulty heater wire.

extrusion.

9. Install new anti-condensate wiring (see Section 5-B: Anti-Condensate Wiring Diagrams for additional information on how to run the wiring).
10. Using an electrical meter, verify continuity of new heater wiring.
11. Re-install upper and lower striker, then the vertical.
12. Re-install foam stripping (be certain it's inserted correctly) and close all the doors.
13. After verifying the continuity of the heater again, connect the heater wire to case wiring.
14. Restore case power in order to verify proper operation.
15. Re-install the front panel, then the front panel joint trim (if present), and then the front bumper (if present).

4-G. REVERSING DOOR SWING

DOOR

NOTE: Door must be removed before reversing the door swing (see Section 3-C).

1. Remove and disconnect the door power coupling from door wiring (see Section 3-G).
2. Remove the torsion rod from the door (see Section 3-F).
3. Insert fish tape through torsion rod end until it protrudes through the other end of the door. Tape door wires to fish tape, then pull the wires back through the door until they protrude from the torsion rod end.
4. Re-attach the door power coupling to the door wiring and re-insert into the former torsion rod opening. Re-install the torsion rod in the opposite end.

FRONT SILL

5. Remove the front bumper (if present), the front panel joint trim (if present), then lift and remove the front panel.
6. Disconnect the frame power coupling wiring from case wiring, then remove the frame power coupling (see Section 4-C).
7. At the new location where the frame power coupling will be installed, remove the plastic plug button (Fig. 4.16).
8. Install the frame power coupling where the plug button was removed, then install the plug button at the old location of the frame power coupling.
9. Cut wire ties (as needed) that are securing the frame power coupling wires to the case (Fig. 4.17). and move wiring to new location.



Fig 4.17 Remove the plastic plug button at the new location of the frame power coupling.

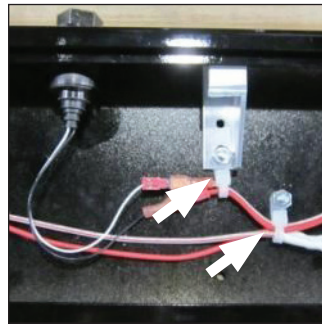


Fig 4.16 Cut wire ties (as needed) that are securing frame power coupling wiring.

10. Re-attach the frame power coupling to case wiring at new location. Re-secure wiring with new wire ties (IMPORTANT TO SECURE TO WIRING)
11. Re-install the front panel, then the front panel joint trim (if present), and then the front bumper (if present).

CORNICE

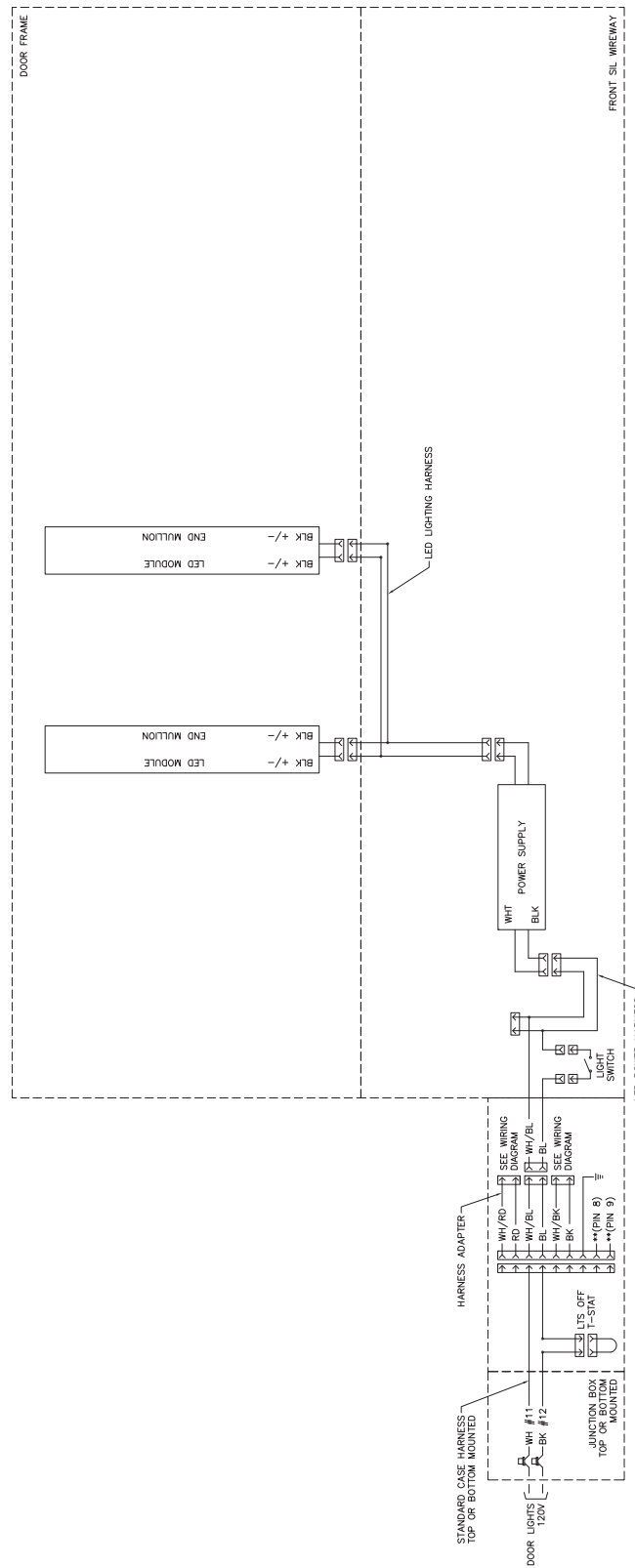
NOTE: Replacement torsion washer is required prior to reversing door-squaring mechanism. **DO NOT ATTEMPT** without this part.

12. Complete steps 1–2 of the instructions for replacing door-squaring mechanisms (see *Section 4-D*).
13. Complete step 2 of the instructions for replacing torsion washers (see *Section 4-E*).
14. Rotate the door-squaring mechanism 180° and re-insert through the relief cutout over the torsion washer.
15. Slide the squaring mechanism towards the new torsion rod location of the door.
16. Re-install nut to pinion. Tighten until finger-tight.
17. Re-install the door (see *Section 3-D*) and the hold-open assembly (see *Section 3-B*), then square the door (*Section 3-E*) as needed.
18. Fully tighten the nut to pinion with a 1/4 turn with the Hillphoenix door tool.

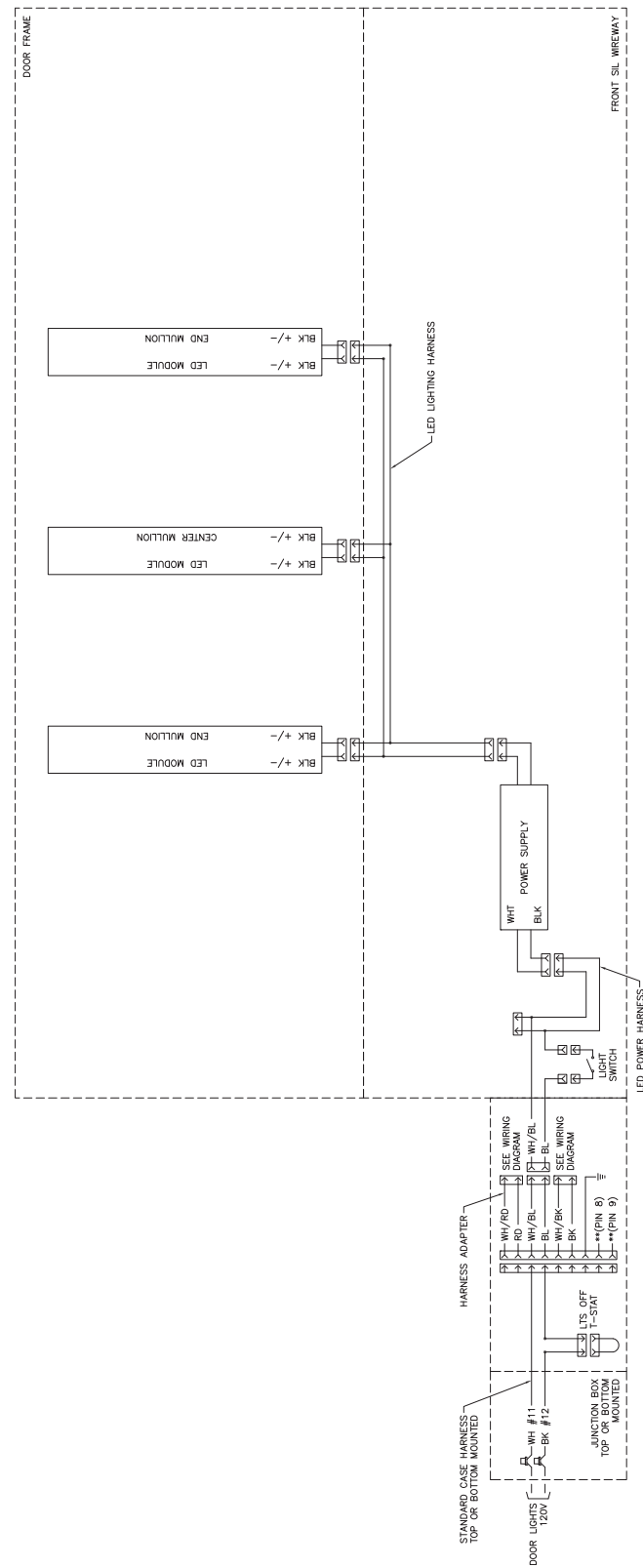
WIRING DIAGRAMS

5-A. LED WIRING DIAGRAMS

1 DOOR

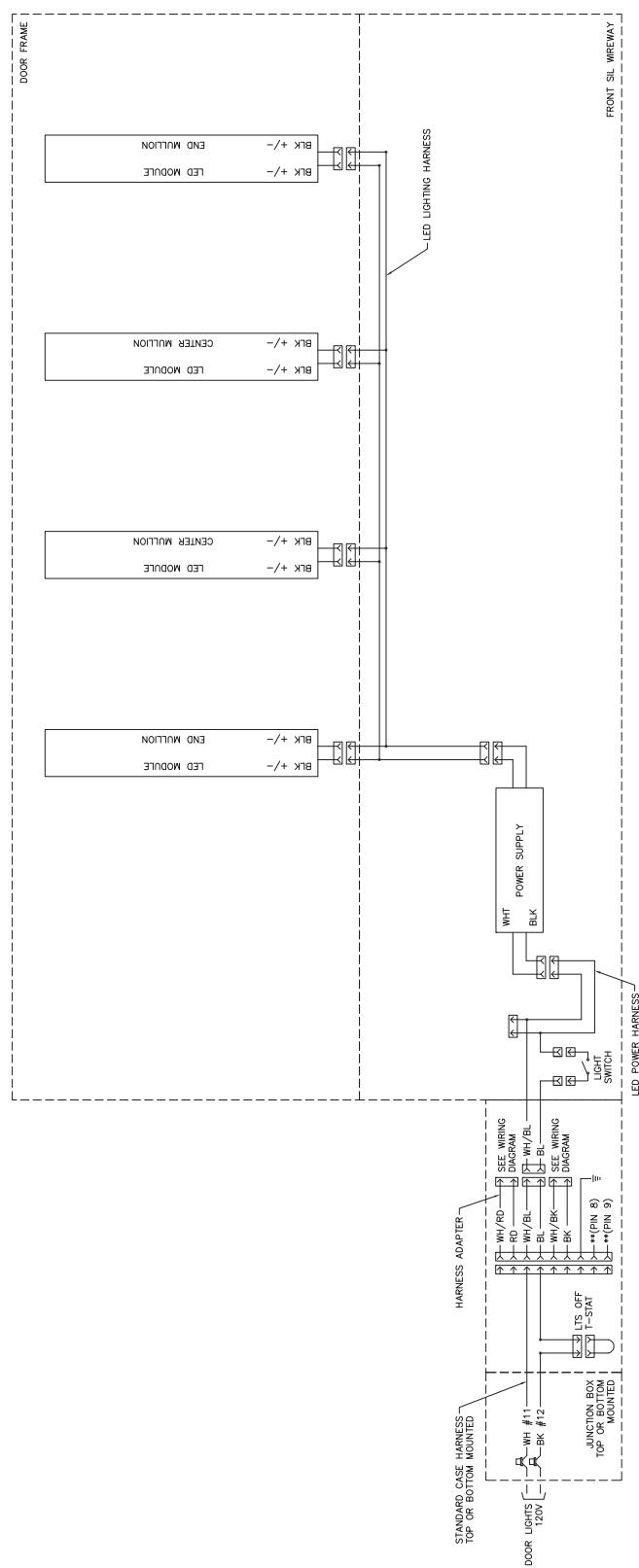


2 DOOR - 6FT

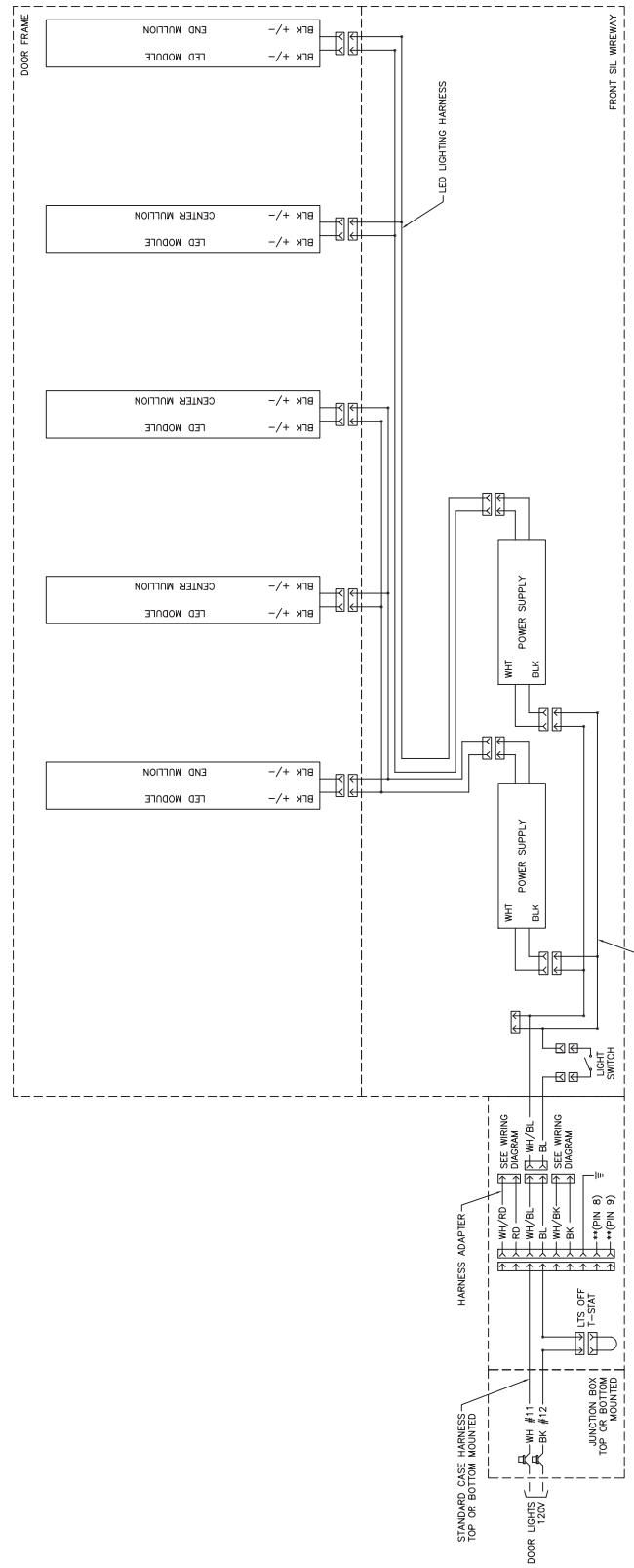


5. WIRING

3 DOOR - 8FT - 9FT

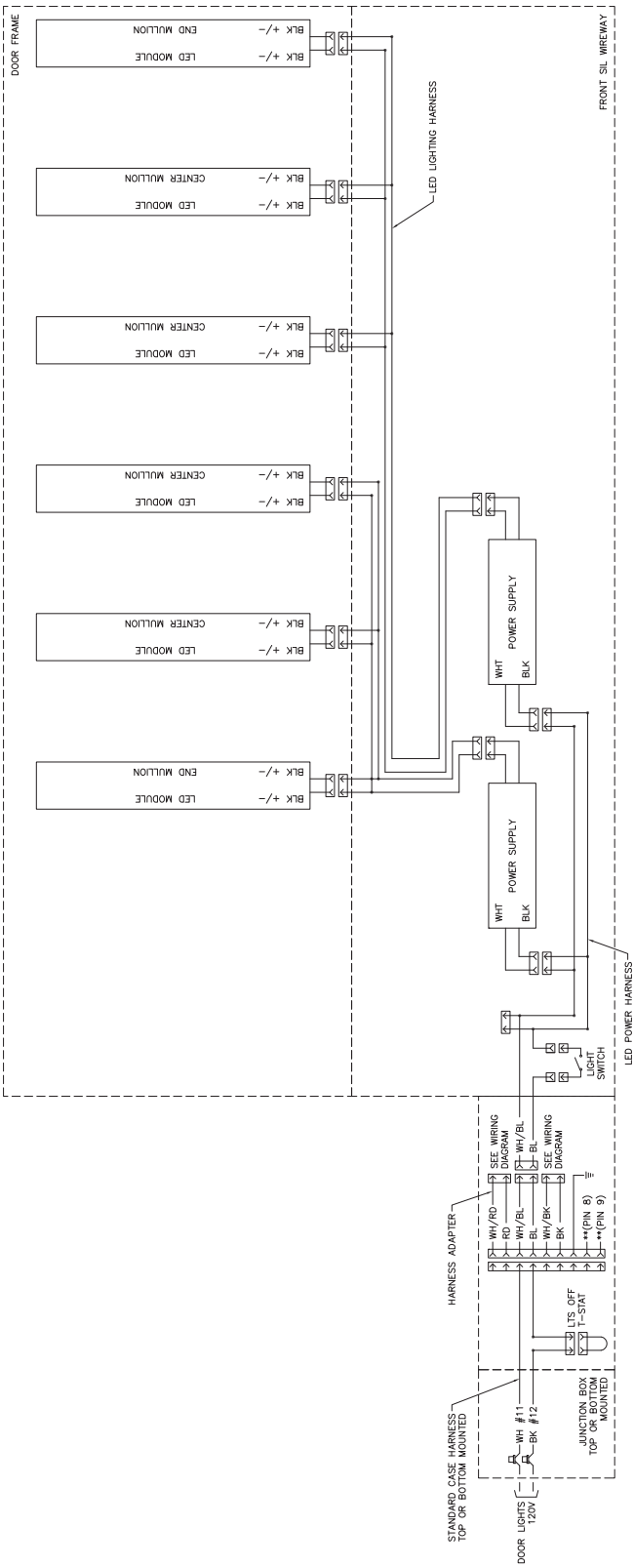


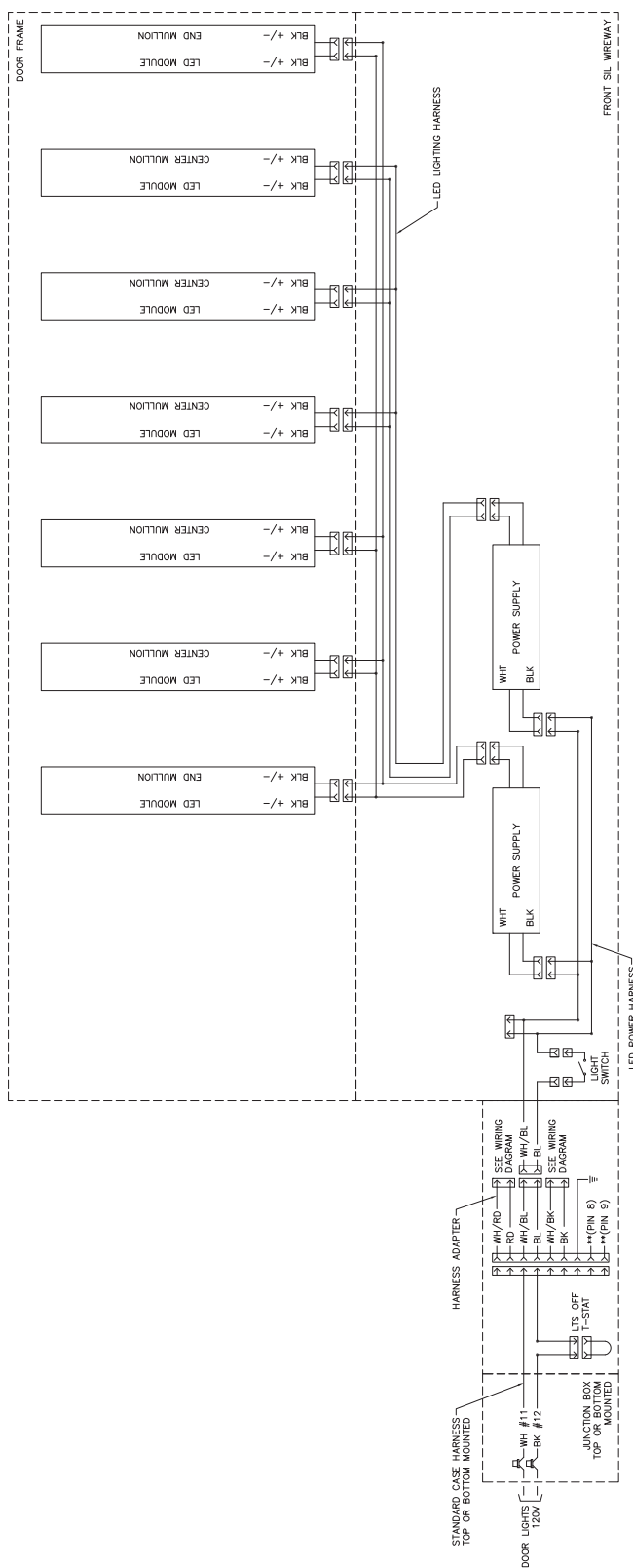
4 DOOR - 12FT



5. WIRING

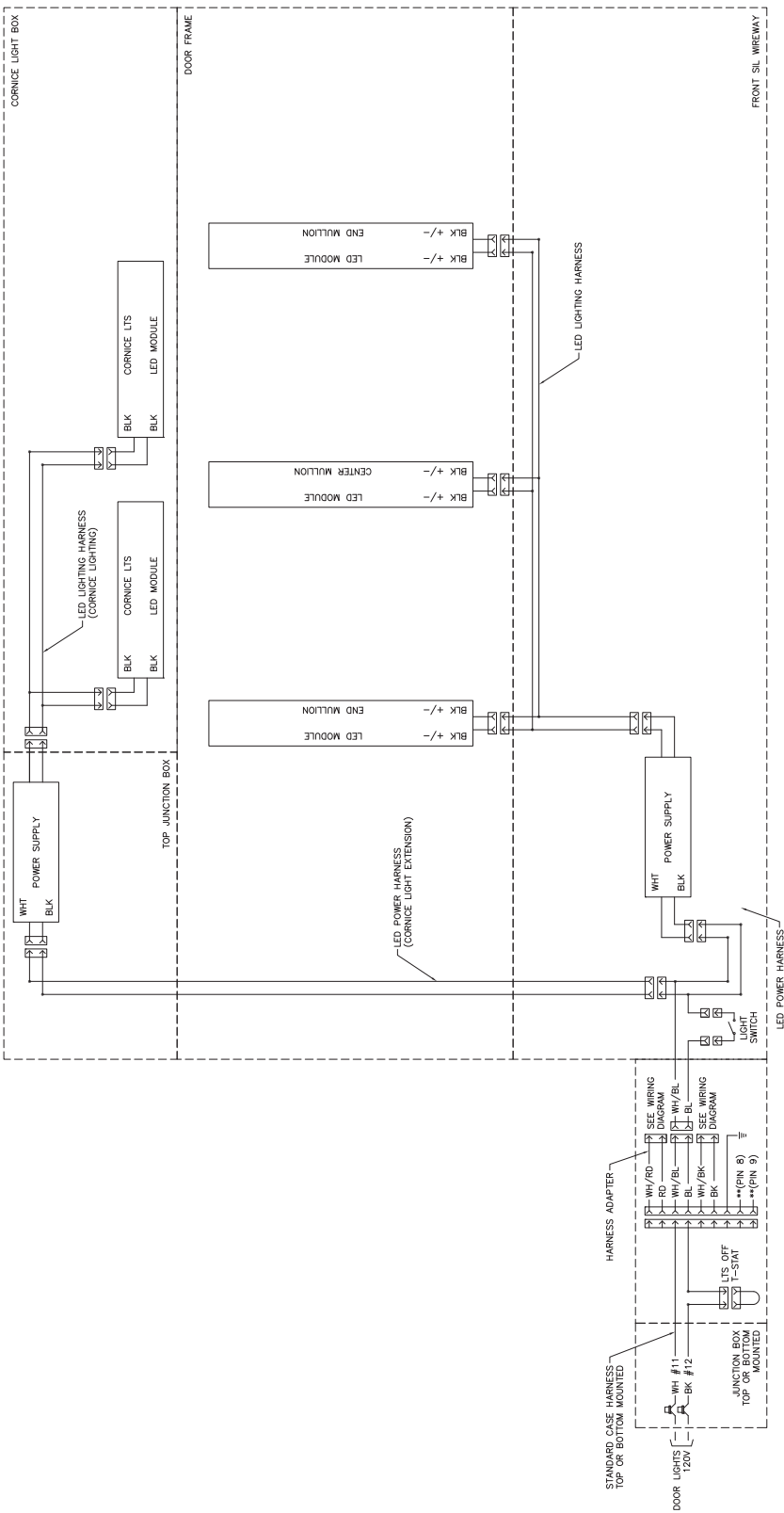
5 DOOR



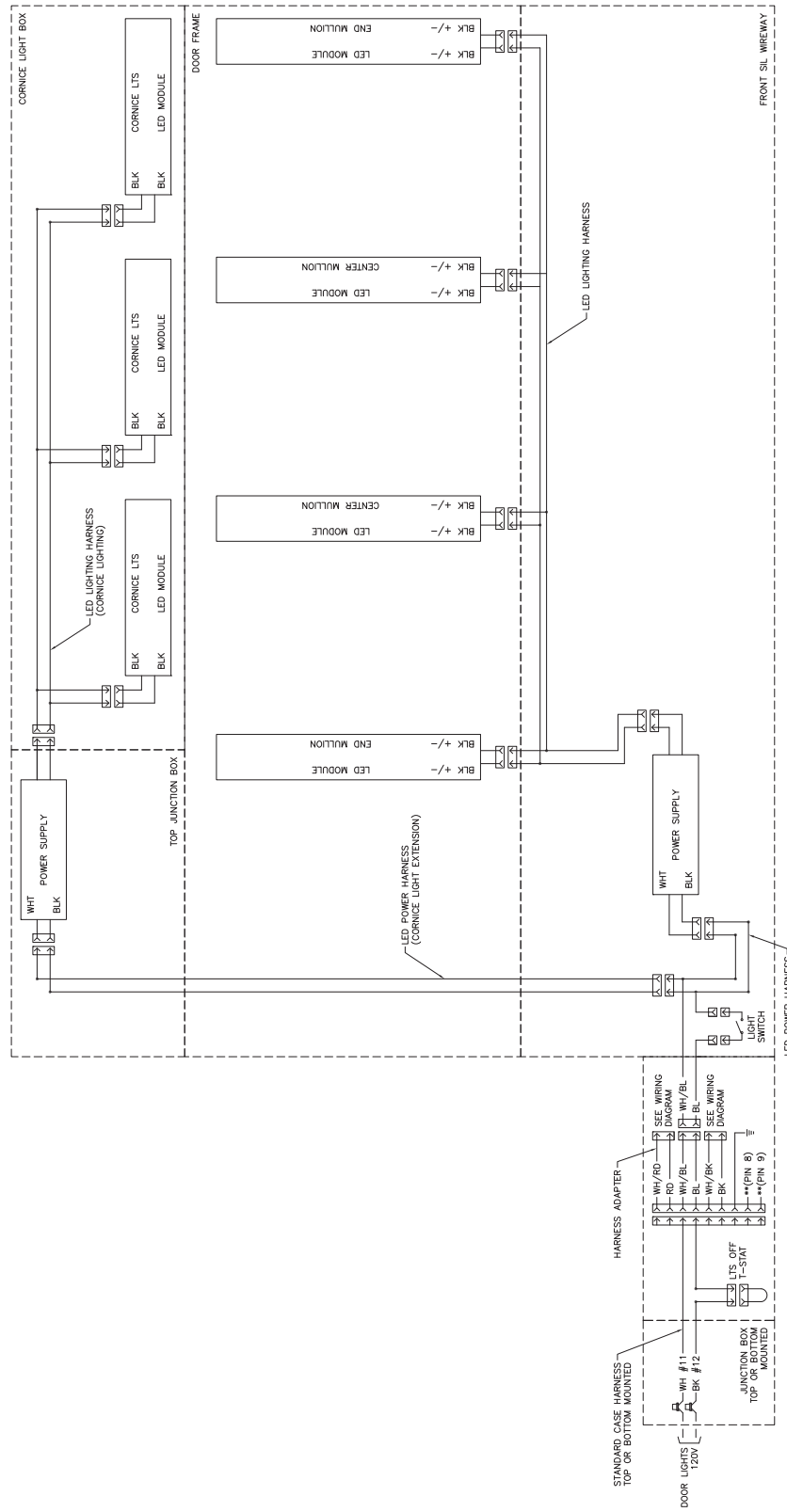


5. WIRING

8FT
(BI-SWING)



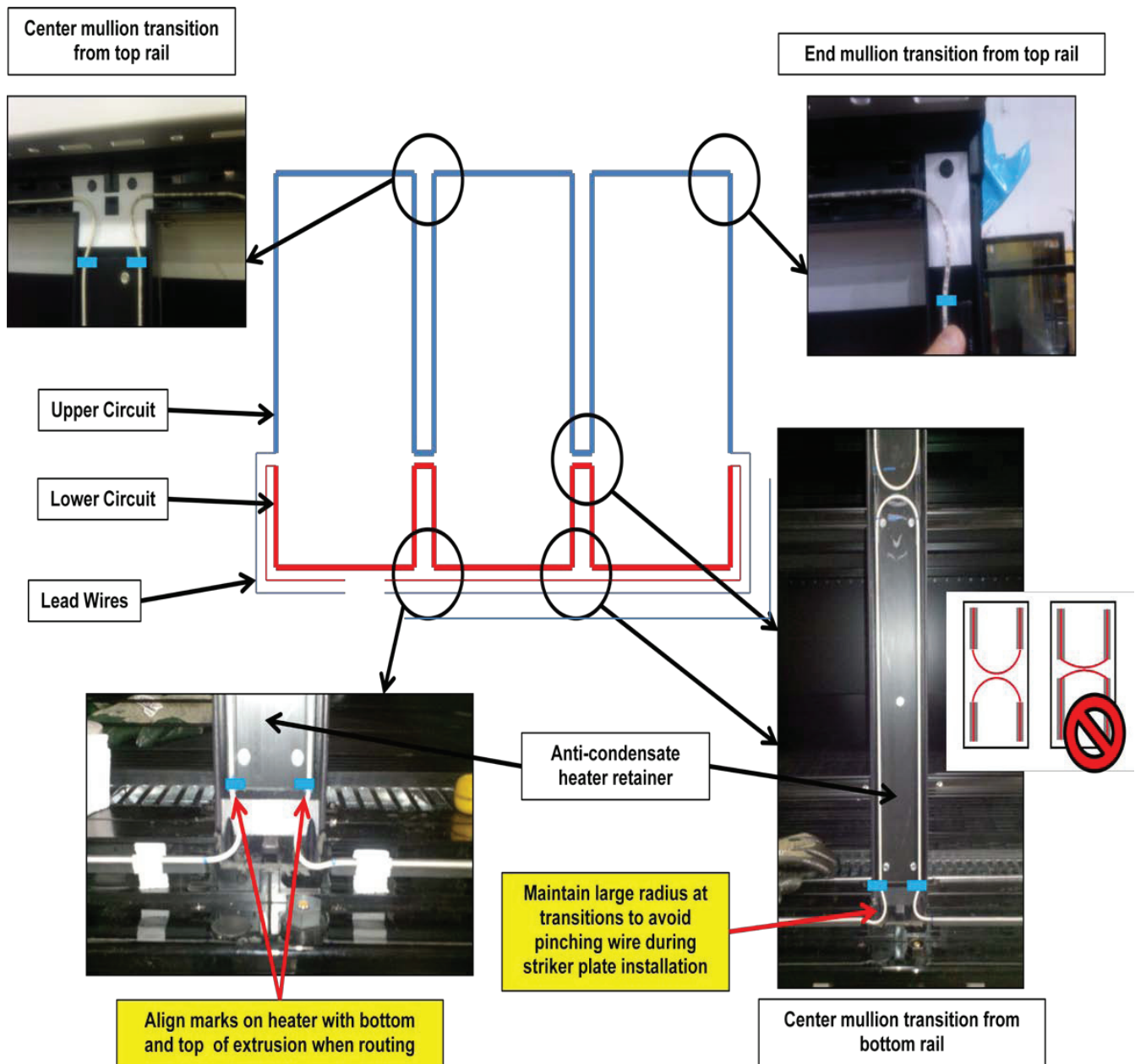
12FT
(BI-SWING)



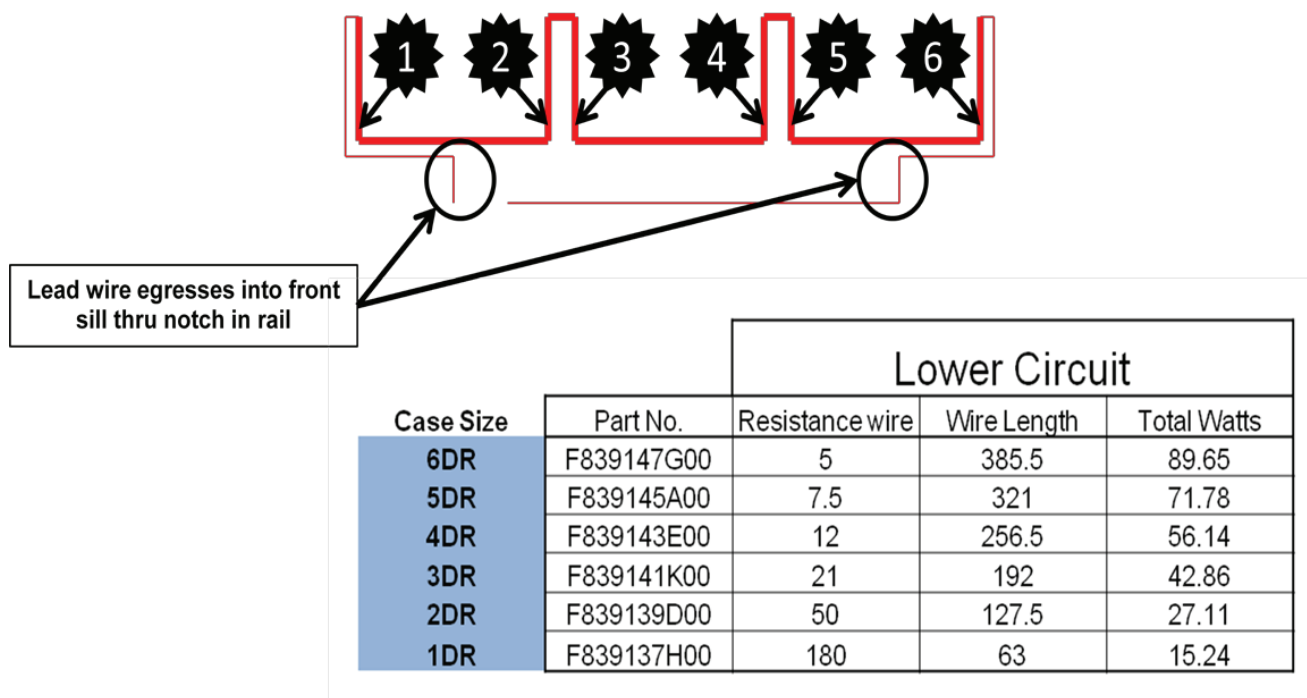
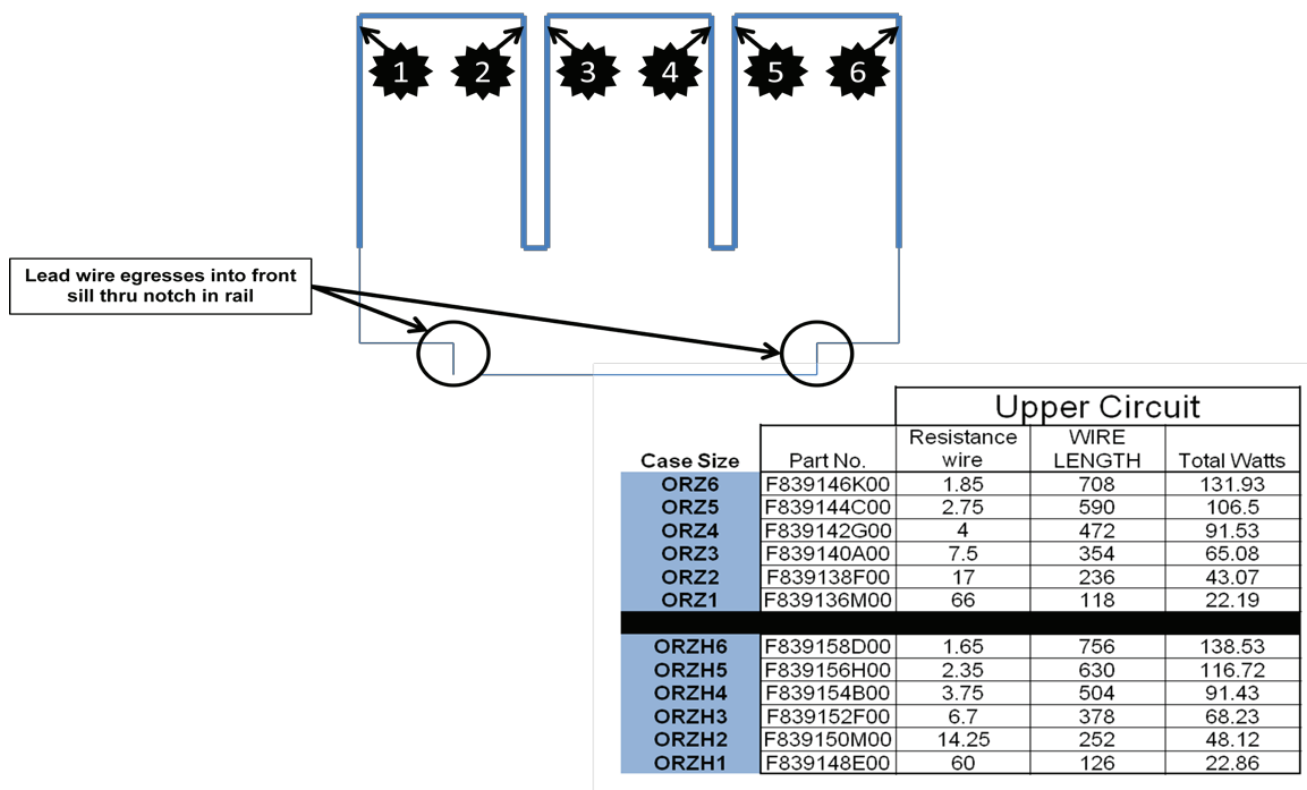
5. WIRING

5-B. ANTI-CONDENSATE WIRING DIAGRAMS

LOW TEMP WIRING

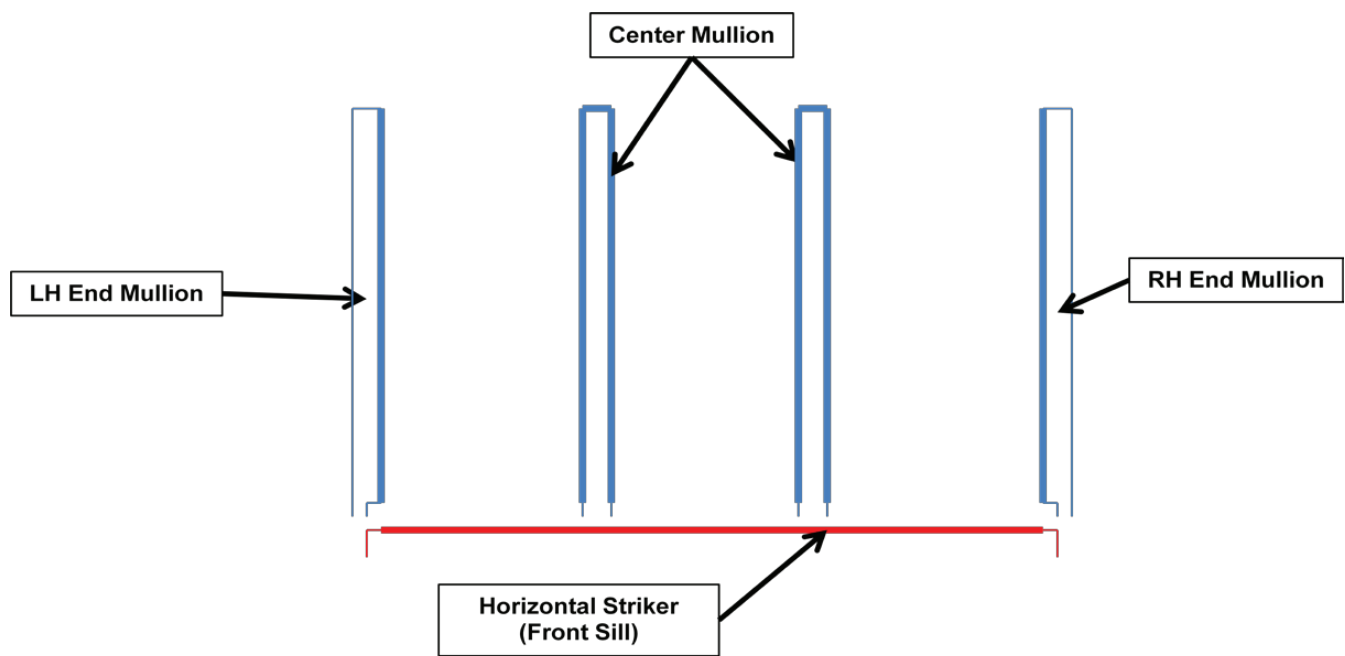


LOW TEMP WIRING



5. WIRING

MEDIUM TEMP WIRING



X and 6 Series	End Mullion	Ctr Mullion	Front sill
8'	F833292F00	F833293D00	F833294B00
12'	F833292F00	F833293D00	F833295M00
8' b-swing	F833292F00	F833293D00	F833294B00
12' b-swing	F833292F00	F833293D00	F833295M00
2DR	F833292F00	F833293D00	F833376H00
3DR	F833292F00	F833293D00	F833377F00
4DR	F833292F00	F833293D00	F833378D00
5DR	F833292F00	F833293D00	F833379B00

NOTES

NOTES



A  COMPANY

WARRANTY

HEREINAFTER REFERRED TO AS MANUFACTURER

FOURTEEN MONTH WARRANTY. MANUFACTURER'S PRODUCT IS WARRANTED TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USE AND MAINTENANCE FOR A PERIOD OF FOURTEEN MONTHS FROM THE DATE OF ORIGINAL SHIPMENT. A NEW OR REBUILT PART TO REPLACE ANY DEFECTIVE PART WILL BE PROVIDED WITHOUT CHARGE, PROVIDED THE DEFECTIVE PART IS RETURNED TO MANUFACTURER. THE REPLACEMENT PART ASSUMES THE UNUSED PORTION OF THE WARRANTY.

This warranty does not include labor or other costs incurred for repairing, removing, installing, shipping, servicing, or handling of either defective parts or replacement parts.

The fourteen month warranty shall not apply:

1. To any unit or any part thereof which has been subject to accident, alteration, negligence, misuse or abuse, operation on improper voltage, or which has not been operated in accordance with the manufacturer's recommendation, or if the serial number of the unit has been altered, defaced, or removed.
2. When the unit, or any part thereof, is damaged by fire, flood, or other act of God.
3. Outside the continental United States.
4. To labor cost for replacement of parts, or for freight, shipping expenses, sales tax or upgrading.
5. When the operation is impaired due to improper installation.
6. When installation and startup forms are not properly complete or returned within two weeks after startup.

THIS PLAN DOES NOT COVER CONSEQUENTIAL DAMAGES. Manufacturer shall not be liable under any circumstances for any consequential damages, including loss of profit, additional labor cost, loss of refrigerant or food products, or injury to personnel or property caused by defective material or parts or for any delay in its performance hereunder due to causes beyond its control. The foregoing shall constitute the sole and exclusive remedy of any purchases and the sole and exclusive liability of Manufacturer in connection with this product.

The Warranties are Expressly in Lieu of All Other Warranties, Express or Implied and All Other Obligations or Liabilities on Our Part. The Obligation to Repair or Replace Parts or Components Judged to be Defective in Material or Workmanship States Our Entire Liability Whether Based on Tort, Contract or Warranty. We Neither Assume Nor Authorize Any Other Person to Assume for Us Any Other Liability in Connection with Our Product.

MAIL CLAIM TO:

Hillphoenix
Display Merchandisers
1925 Ruffin Mill Road
Colonial Heights, VA 23834
1-800-283-1109

Hillphoenix
Refrigeration Systems &
Electrical Distribution Products
709 Sigman Road
Conyers, GA 30013
770-285-3200

Warning

Maintenance & Case Care

When cleaning cases the following must be performed PRIOR to cleaning:

To avoid electrical shock, be sure all electric power is turned off before cleaning. In some installations, more than one switch may have to be turned off to completely de-energize the case.

Do not spray cleaning solution or water directly on fan motors or any electrical connections.

All lighting components must be dried off prior to insertion and re-energizing the lighting circuit.

Please refer to the Use and Maintenance section of this installation manual.

Hillphoenix

A **DOVER** COMPANY

Tel: 1-800-283-1109

1925 Ruffin Mill Road, Colonial Heights, VA 23834

Due to our commitment to continuous improvement, all specifications are subject to change without notice.

Hillphoenix is a Sustaining Member of the American Society of Quality.

Visit our web site at www.hillphoenix.com

